UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 February 2004*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-19* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *2/19/04*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-19 are pending.

2.   Claims 1-19 are rejected.

Claim Rejections - 35 USC § 101

3.   Claims 11-13 and 18-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a "computer program product, recorded on a computer readable medium" but the specification describes that the medium may take many forms including transmission media. Particularly the specification states in paragraph [0029] that "transmission media can also take the form of acoustic or light waves, such as those generated during radio frequency or infrared data communications." These claims are directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Arberg et al.

United States Patent Application No. 2005/0105529 (hereinafter Arberg).

        As to claim 1, Arberg teaches a method for modifying a Dynamic Host Configuration

Protocol (DHCP) server configuration for a dynamically configured system within a network,

comprising (Paragraph [0023] teaches "A network element modifying the DHCP lease timer is

described herein. In certain embodiments of the invention, a network element that connects

clients to a DHCP server acts as a proxy for that DHCP server." Modifying the DHCP lease

timer for a client is modifying the configuration for a dynamically configured system. Both the

method, system and program are taught.):

        receiving a modify packet from a first system at a DHCP server which manages a stored

configuration for a dynamically configured system (Paragraph [0074] teaches a first system, i.e.

the network element, which sends a modify packet, i.e. lease renewal packet, for a dynamically

configured system, i.e. the client. Arberg teaches "If the subscriber session time is greater or

equal to the DHCP T1 timer (e.g., no enough lease time left in the lease time previously allocated

from DHCP 1104), network element 1101 may forward the DHCP lease renewal packet to

DHCP 1104 for more lease time." It is clear that the DHCP server receives this modify packet

because "in response, network element receives a DHCP reply." Furthermore paragraph [0050]

teaches a stored configuration "Meanwhile, DHCP demon 602 writes DHCP state to the micro-

drive for every DHCP IP address entry, such as, for example, IP address, MAC address, create

time, lease time, circuit information (e.g., slot, port, VPI, and VCI, etc.), which may be stored in

a data structure, such as data structure 500 shown in FIG. 5, also referred to as a DHCP preserve state file."); and

modifying said stored configuration for said dynamically configured system according to said modify packet received from said first system, such that said first system is enabled to request modification of a DHCP server configuration for a dynamically configured system (In paragraph [0074] an acknowledgement reply is sent after a lease renewal request has been received with the new lease information. It is clear that that lease information would also have to be updated where the lease information and configuration is stored for it to actually acknowledge the lease renewal as a valid lease renewal. Additionally, the first system, i.e. network element, would be enabled to modify the lease configuration since a reply is being sent acknowledging that the lease was renewed.).

As to claim 2, Arberg teaches the method according to claim 1 for modifying a DHCP configuration further comprising (Arberg teaches all of the limitations of claim 1):

receiving a request from said first system to register for modification privileges at said DHCP server (Paragraph [0036] teaches the network element requesting and using optional authentication, authorization and accounting (AAA) services using RADIUS.);

responsive to said first system qualifying for modification privileges, storing a record of said registration at said DHCP server for authenticating said modify packet as received from a registered system (Paragraph [0069] describes the AAA processes, i.e. registration, which includes storing information associated with the network element which is using RADIUS services.).

As to claim 3, Arberg teaches the method according to claim 1 for modifying a DHCP configuration further comprising (Arberg teaches all of the limitations of claim 1):

only modifying said stored configuration for said dynamically configured system according to said modify packet if said first system is authenticated as registered with said DHCP server for modification privileges (Paragraph [0036] teaches that using the AAA RADIUS services are optional for the method, but if used, it is clear that by using authorization methods certain privileges would be restricted. In the case of authenticating and authorizing the network element, it would only be able to do its function, proxy DHCP or lease renewals, if it were authorized.).

As to claim 4, Arberg teaches the method according to claim 1 for modifying a DHCP configuration, wherein receiving a modify packet from a first system further comprises (Arberg teaches all of the limitations of claim 1):

receiving said modify packet from said first system, wherein said first system is a statically configured system (Arberg teaches that the network element, i.e. the first system, interfaces with the clients, i.e. dynamically configured systems, as a proxy DHCP or relay agent. In paragraphs [0029-0030] teach that the network element acts as a DHCP server and therefore statically configured.).

As to claim 5, Arberg teaches the method according to claim 1 for modifying a DHCP configuration, wherein receiving a modify packet from a first system further comprises (Arberg teaches all of the limitations of claim 1):

receiving said modify packet from said first system, wherein said modify packet specifies one from among a DHCP client, class and network, a particular option from among a plurality of DHCP options, and a value to assigned to said particular option (Paragraph [0074] teaches the network element, i.e. the first system, sending a lease renewal packet to the server. The packet specifies both the client and the lease time.).

As to claim 6, Arberg teaches a system for modifying a Dynamic Host Configuration Protocol (DHCP) server configuration for a dynamically configured system within a network, comprising (Paragraph [0023] teaches "A network element modifying the DHCP lease timer is described herein. In certain embodiments of the invention, a network element that connects clients to a DHCP server acts as a proxy for that DHCP server." Modifying the DHCP lease timer for a client is modifying the configuration for a dynamically configured system. Both the method, system and program are taught.):

a dynamically configured system communicative connected to a network (Paragraph [0029] teaches the clients as dynamically configured system communicative connected to a network. The Clients are connected on the network and are configured through DHCP.); and

a DHCP server communicatively connected to said network, wherein said DHCP server manages a stored configuration for said dynamically configured system, wherein responsive to receiving a modify packet from a first system to modify said stored configuration for said

dynamically configured system, said DHCP server modifies said stored configuration for said dynamically configured system according to said modify packet received from said first system(Paragraph [0074] teaches a first system, i.e. the network element, which sends a modify packet, i.e. lease renewal packet, for a dynamically configured system, i.e. the client. Arberg teaches "If the subscriber session time is greater or equal to the DHCP T1 timer (e.g., no enough lease time left in the lease time previously allocated from DHCP 1104), network element 1101 may forward the DHCP lease renewal packet to DHCP 1104 for more lease time." It is clear that the DHCP server receives this modify packet because "in response, network element receives a DHCP reply." Furthermore paragraph [0050] teaches a stored configuration "Meanwhile, DHCP demon 602 writes DHCP state to the micro-drive for every DHCP IP address entry, such as, for example, IP address, MAC address, create time, lease time, circuit information (e.g., slot, port, VPI, and VCI, etc.), which may be stored in a data structure, such as data structure 500 shown in FIG. 5, also referred to as a DHCP preserve state file." Also in paragraph [0074] an acknowledgement reply is sent after a lease renewal request has been received with the new lease information. It is clear that that lease information would also have to be updated where the lease information and configuration is stored for it to actually acknowledge the lease renewal as a valid lease renewal.).

As to claim 7, Arberg teaches the system according to claim 6 for modifying a DHCP configuration, wherein said DHCP server further comprises (Arberg teaches all of the limitations of claim 6):

means for receiving a request from said first system to register for modification privileges at said DHCP server (Paragraph [0036] teaches the network element requesting and using optional AAA services using RADIUS.);

means, responsive to said first system qualifying for modification privileges, for storing a record of said registration at said DHCP server for authenticating said modify packet as received (Paragraph [0069] describes the AAA processes, i.e. registration, which includes storing information associated with the network element which is using RADIUS services.).

As to claim 8, Arberg teaches the system according to claim 6 for modifying a DHCP configuration, wherein said DHCP server further comprises (Arberg teaches all of the limitations of claim 6):

means for only modifying said stored configuration for said dynamically configured system according to said modify packet if said first system is authenticated as registered with said DHCP server for modification privileges (Paragraph [0036] teaches that using the AAA RADIUS services are optional for the method, but if used, it is clear that by using authorization methods certain privileges would be restricted. In the case of authenticating and authorizing the network element, it would only be able to do its function, proxy DHCP or lease renewals, if it were authorized.).

As to claim 9, Arberg teaches the system according to claim 6 (Arberg teaches all of the limitations of claim 6) for modifying a DHCP configuration wherein said first system is a statically configured system in said network (Arberg teaches that the network element, i.e. the

first system, interfaces with the clients, i.e. dynamically configured systems, as a proxy DHCP or

relay agent. In paragraphs [0029-0030] teach that the network element acts as a DHCP server

and therefore statically configured.).

As to claim 10, Arberg teaches the system according to claim 6 (Arberg teaches all of the

limitations of claim 6) for modifying a DHCP configuration wherein said modify packet

specifies one from among a DHCP client, class and network, a particular option from among a

plurality of DHCP options, and a value to assigned to said particular option (Paragraph [0074]

teaches the network element, i.e. the first system, sending a lease renewal packet to the server.

The packet specifies both the client and the lease time.).

As to claim 11, Arberg teaches a computer program product, recorded on a computer

readable medium, for modifying a Dynamic Host Configuration Protocol (DHCP) server

configuration for a dynamically configured system within a network, comprising (Paragraph

[0023] teaches "A network element modifying the DHCP lease timer is described herein. In

certain embodiments of the invention, a network element that connects clients to a DHCP server

acts as a proxy for that DHCP server." Modifying the DHCP lease timer for a client is modifying

the configuration for a dynamically configured system. Both the method, system and program

are taught.):

means for enabling receipt of a modify packet from a first system at a DHCP server

which manages a stored configuration for a dynamically configured system (Paragraph [0074]

teaches a first system, i.e. the network element, which sends a modify packet, i.e. lease renewal

packet, for a dynamically configured system, i.e. the client. Arberg teaches "If the subscriber

session time is greater or equal to the DHCP T1 timer (e.g., no enough lease time left in the lease

time previously allocated from DHCP 1104), network element 1101 may forward the DHCP

lease renewal packet to DHCP 1104 for more lease time." It is clear that the DHCP server

receives this modify packet because "in response, network element receives a DHCP reply."

Furthermore paragraph [0050] teaches a stored configuration "Meanwhile, DHCP demon 602

writes DHCP state to the micro-drive for every DHCP IP address entry, such as, for example, IP

address, MAC address, create time, lease time, circuit information (e.g., slot, port, VPI, and VCI,

etc.), which may be stored in a data structure, such as data structure 500 shown in FIG. 5, also

referred to as a DHCP preserve state file." The first system is enabled because the packet is

received.); and

means for controlling modification of said stored configuration for said dynamically

configured system according to said modify packet received from said first system (In paragraph

[0074] an acknowledgement reply is sent after a lease renewal request has been received with the

new lease information. It is clear that that lease information would also have to be updated

where the lease information and configuration is stored for it to actually acknowledge the lease

renewal as a valid lease renewal. Additionally, the first system, i.e. network element, in

conjunction with storing the modified configuration would be controlling the modification of the

lease configuration.).

As to claim 12, Arberg teaches the computer program product according to claim 11 for modifying a DHCP configuration further comprising (Arberg teaches all of the limitations of claim 11.):

means for enabling receipt of a request from said first system to register for modification privileges at said DHCP server (Paragraph [0036] teaches the network element requesting and using optional AAA services using RADIUS.);

means, responsive to said first system qualifying for modification privileges, for controlling storage of a record of said registration at said DHCP server for authenticating said modify packet as received from a registered system (Paragraph [0069] describes the AAA processes, i.e. registration, which includes storing information associated with the network element which is using RADIUS services.).

As to claim 13, Arberg teaches the computer program product according to claim 11 for modifying a DHCP configuration further comprising (Arberg teaches all of the limitations of claim 11):

means for only enabling modification of said stored configuration for said dynamically configured system according to said modify packet if said first system is authenticated as registered with said DHCP server for modification privileges (Paragraph [0036] teaches that using the AAA RADIUS services are optional for the method, but if used, it is clear that by using authorization methods certain privileges would be restricted. In the case of authenticating and authorizing the network element, it would only be able to do its function, proxy DHCP or lease renewals, if it were authorized.).

As to claim 14, Arberg teaches a method for requesting modification of a DHCP configuration of a dynamically configured system, comprising (Paragraph [0074] teaches the network element forwarding a DHCP lease renewal packet. The network element is requesting modification of the lease time for a dynamically configured system.):

specifying, at a first system, a modify packet to request modification of a stored configuration for a dynamically configured system (Paragraph [0050] teaches a stored configuration "Meanwhile, DHCP demon 602 writes DHCP state to the micro-drive for every DHCP IP address entry, such as, for example, IP address, MAC address, create time, lease time, circuit information (e.g., slot, port, VPI, and VCI, etc.), which may be stored in a data structure, such as data structure 500 shown in FIG. 5, also referred to as a DHCP preserve state file." Paragraph [0074] teaches the network element, i.e. first system, sending a lease renewal packet. By sending this packet, the packet is being specified for modification.); and

sending said modify packet to a DHCP server which manages said stored configuration for said dynamically configured system, wherein said DHCP server is enabled to modify said stored configuration according to said modify packet (Paragraph [0074] teaches the packet being sent, and the DHCP server sends a reply packet. By sending a reply packet the server is enabled to modify the lease time, i.e. stored configuration.).

As to claim 15, Arberg teaches the method according to claim 14 for requesting modification further comprising (Arberg teaches all of the limitations of claim 14):

sending a registration request for modification privileges to said DHCP server (Paragraph

[0036] teaches the network element requesting and using optional AAA services using

RADIUS.); and

responsive to receiving an indicator that said modification privileges are granted by said

DHCP server, sending said modify packet to said DHCP server (Paragraph [0069] describes the

AAA processes, i.e. registration, which includes storing information associated with the network

element which is using RADIUS services.).

As to claim 16, Arberg teaches a system for requesting modification of a DHCP

configuration of a dynamically configured system, comprising (Paragraph [0074] teaches the

network element forwarding a DHCP lease renewal packet. The network element is requesting

modification of the lease time for a dynamically configured system.):

a first system communicatively connected via a network to a DHCP server for managing

a stored configuration of a dynamically configured system (Paragraph [0050] teaches a stored

configuration "Meanwhile, DHCP demon 602 writes DHCP state to the micro-drive for every

DHCP IP address entry, such as, for example, IP address, MAC address, create time, lease time,

circuit information (e.g., slot, port, VPI, and VCI, etc.), which may be stored in a data structure,

such as data structure 500 shown in FIG. 5, also referred to as a DHCP preserve state file."

Paragraph [0074] teaches the network element, i.e. first system, sending a lease renewal packet.

By sending this packet, the packet is being specified for modification.);

said first system further comprising (Arberg teaches the first system as the network

element, which specifies and sends a modify packet to the server for the client device.):

means for specifying, at a first system in a network, a modify packet to request

modification of a stored configuration for a dynamically configured system in said network

system (Paragraph [0050] teaches a stored configuration "Meanwhile, DHCP demon 602 writes

DHCP state to the micro-drive for every DHCP IP address entry, such as, for example, IP

address, MAC address, create time, lease time, circuit information (e.g., slot, port, VPI, and VCI,

etc.), which may be stored in a data structure, such as data structure 500 shown in FIG. 5, also

referred to as a DHCP preserve state file." Paragraph [0074] teaches the network element, i.e.

first system, sending a lease renewal packet. By sending this packet, the packet is being

specified for modification and the means for specifying the packet are the network element and

the software running on it.); and

means for sending said modify packet to a DHCP server which manages said stored

configuration for said dynamically configured system, wherein said DHCP server is enabled to

modify said stored configuration according to said modify packet (The means for sending and

receiving packets is taught by having the client, network element and server communicating

through the network. Paragraph [0074] teaches the packet being sent, and the DHCP server

sends a reply packet. By sending a reply packet the server is enabled to modify the lease time,

i.e. stored configuration.).

As to claim 17, Arberg teaches the system according to claim 16 for requesting

modification, said first system further comprising (Arberg teaches all of the limitations of claim

16):

means for sending a registration request for modification privileges to said DHCP server

(Paragraph [0036] teaches the network element requesting and using optional AAA services

using RADIUS.); and

means, responsive to receiving an indicator that said modification privileges are granted

by said DHCP server, for sending said modify packet to said DHCP server (Paragraph [0069]

describes the AAA processes, i.e. registration, which includes storing information associated

with the network element which is using RADIUS services.).

As to claim 18, Arberg teaches A computer program product, recorded on a computer

readable medium, for requesting modification of a DHCP configuration of a dynamically

configured system, comprising (Paragraph [0074] teaches the network element forwarding a

DHCP lease renewal packet. The network element is requesting modification of the lease time

for a dynamically configured system.):

means for controlling specification, by a first system, of a modify packet to request

modification of a stored configuration for a dynamically configured system (Paragraph [0050]

teaches a stored configuration "Meanwhile, DHCP demon 602 writes DHCP state to the micro-

drive for every DHCP IP address entry, such as, for example, IP address, MAC address, create

time, lease time, circuit information (e.g., slot, port, VPI, and VCI, etc.), which may be stored in

a data structure, such as data structure 500 shown in FIG. 5, also referred to as a DHCP preserve

state file." Paragraph [0074] teaches the network element, i.e. first system, sending a lease

renewal packet. By sending this packet, the packet is being specified for modification and the

means for specifying the packet are the network element and the software running on it.); and

means for enabling transmission of said modify packet to a DHCP server which manages

said stored configuration for said dynamically configured system, wherein said DHCP server is

enabled to modify said stored configuration according to said modify packet (The means for

sending and receiving packets is taught by having the client, network element and server

communicating through the network. Paragraph [0074] teaches the packet being sent, and the

DHCP server sends a reply packet. By sending a reply packet the server is enabled to modify the

lease time, i.e. stored configuration.).

As to claim 19, Arberg teaches the computer program product according to claim 18 for

requesting modification further comprising (Arberg teaches all of the limitations of claim 18):

means for enabling transmission of a registration request for modification privileges to

said DHCP server (Paragraph [0036] teaches the network element requesting and using optional

AAA services using RADIUS.); and

means, responsive to receiving an indicator that said modification privileges are granted

by said DHCP server, for enabling said transmission of said modify packet to said DHCP server

(Paragraph [0069] describes the AAA processes, i.e. registration, which includes storing

information associated with the network element which is using RADIUS services.).

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure:

Hsu, Patent Application Number 2004/0162892, directed to provisioning server information in a mobile station;

MacPherson et al., Patent Number 7296152, directed to providing access to a network in a communications environment;

Kinnear et al., Patent Number 7139818, directed to a DHCP proxy;

Arberg et al., Patent Application Number 2005/114492, directed to a DHCP proxy network element;

Banerjee et al., Patent Application Number 20030163341, directed to dynamically updating DHCP options.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW E. KESSLER whose telephone number is (571)270-5005. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571)272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 4121
12/6/2007